

# **Quarterly Review and Outlook** Using the CAPE Ratio

02 2025 - Robert J. Shiller and Laurence Black

#### The Return of Strongmen and the Tariff Dilemma

The first quarter of 2025 was volatile, marked by significant uncertainty and a growing sense of unease among investors. This is just a prelude of things to come. The sense of unease before tariffs were announced was palpable, consumer confidence weakened, and inflation expectations rose sharply. The University of Michigan Consumer Surveys show U.S. consumers now expect inflation at 3.9% over the next five years<sup>1</sup>. In early April, the federal government finally launched their tariff program, which was much more punitive than markets expected; it caused major market dislocations and in a matter of days, major equity benchmarks lost over 10%. A pause in these tariffs caused markets to rip back up.

One dominant narrative shaping markets today is the return of the "strongman" in global politics. This quarter has underscored the emergence of three central figures in world affairs: Donald Trump, Xi Jinping and Vladimir Putin. These leaders appear to be shaping the global order in ways reminiscent of another pivotal moment in history – the Yalta Conference of 1945, where Churchill, Roosevelt and Stalin convened to redraw geopolitical boundaries after World War II. Although the current strongmen are not as in sync as in Yalta, we now see a world in flux, with long-standing alliances tested. The notion of free trade, once considered the bedrock of economic progress, is increasingly under strain. The fracturing of long-standing norms may indicate that we may be entering a phase of deglobalization, marked by nationalistic policies and economic fragmentation. Based on the U.S. tariff approach and rhetoric, the U.S. may take a more isolationist approach, but the financial markets' poor reaction to the announcements may slow this.

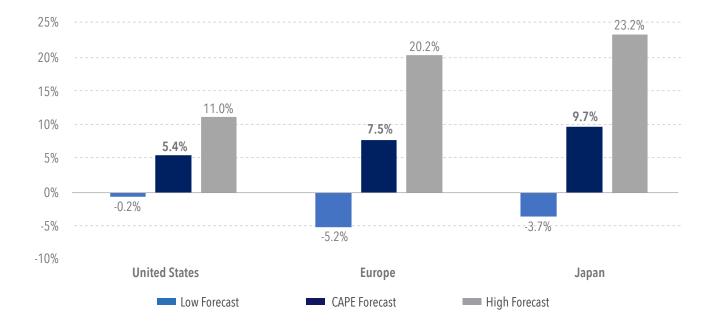
Now that the tariffs have been launched, it is worth examining two historical precedents. The McKinley Tariffs of 1890 sought to protect U.S. industries by imposing steep import duties, offers an interesting historical parallel. While designed to bolster domestic manufacturing, its unintended consequence was a surge in consumer prices and a subsequent political backlash. The Smoot-Hawley Tariff of 1930 provides another parallel. By raising tariffs on more than 20,000 imported goods, it triggered retaliatory measures from trading partners, deepened the Great Depression, and choked global commerce. The recently announced tariffs may act as a tax on consumption that raises prices, fuels inflation and dampens economic growth.

The current environment creates a major dilemma for the Fed as tariffs are usually inflationary, which limits their ability to cut interest rates if the economy slows over the short term. The so-called long-term benefits of tariffs such as onshoring or increased manufacturing in the U.S. may take years to materialize, if indeed, they do at all. Another underappreciated driver of inflation is the changing labor supply, which has been shifting due to immigration policy changes. Donald Trump's tough stance on immigration, reinforced by visible deportations, appears to have reduced inflows of foreign labor. While politically significant, this also introduces inflationary pressures by tightening the labor market, potentially driving up wages and business costs.

The overarching theme of this quarter is potentially the start of a major transition – from globalization to protectionism, from free markets to managed trade, and from economic integration to strategic competition. Markets are moving fast, with the S&P just under 5000 and the CAPE is 30.5. Comparatively, international markets have cheaper valuations. The CAPE ratio for Europe stands at 19.4 and for Japan it is 20.3. We forecast U.S. returns at 5.4%, European returns at 7.5%, and Japan at 9.7%, which suggests more attractive opportunities abroad. Considering these expected returns and geopolitical uncertainty, and as we have noted in the past, a diversified portfolio across regions and asset classes remains prudent. These forecasts and all data are as of the close of business of April 8, 2025.

#### Key Findings: Our Forecasts Based on the CAPE Ratio

Note these forecasts are in local currencies. These are nominal returns, and the equalization of expected returns between the United States and Europe is partly being driven by different inflation expectations. We use trailing OECD forecast and historical inflation numbers and include the Q4 2025 expected expectation numbers. For the U.S. this is 2.7%, 2.4% for Europe, and for Japan it is 1% (note that these introduce another range of uncertainty into the forecasts). We show a range for a 95% prediction interval indicating our uncertainty around these forecasts. We use conventional tools to forecast expected returns; however, financial markets are very unpredictable, making forecasting an inherently difficult task. In addition, unforeseen events provide another layer of difficulty and can impact our forecasts in both a positive and negative manner.



#### **A Note About Forecasting**

These are annualized long-term forecasts with a horizon of 10 years. These forecasts are intended to provide a framework and guide investors around strategic equity allocations. They are not intended for those seeking to time markets or obtain short- to medium-term forecasts, as short-term forecasts are unreliable. The forecasts are presented as nominal total annualized returns in local currencies and are presented as a guide only. The forecasts make no attempt to judge the impact of one-of-a-kind factors like COVID-19, political changes, or monetary policy changes; not because these are not potentially important, but because we are not able to quantify them without guesswork. We also show ranges here (95% prediction intervals) to give some indication of the uncertainty around our forecasts. The reader must bear in mind that prediction intervals are hampered by fundamental epistemic uncertainty, which is unquantifiable. For example, some would argue that the upper bound for the 10-year annualized return for Japan in the preceding table is too high, based on their knowledge that the investors in Japan have learned their lesson from the 1980s-1990s and will not overprice markets that much again. It is impossible to be sure one way or the other whether this "knowledge" is correct since it relies on human judgment about people's thinking.

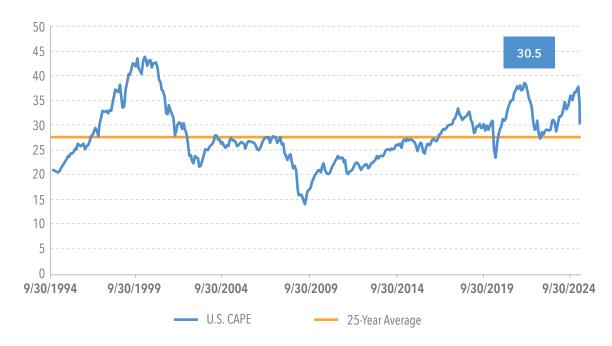
# United States - Forecasts Based on the S&P 500 Index

The CAPE Ratio for the United States is 30.5 (as of April 8, before the pause on tariffs) and the expected 10-year annualized nominal total return is 5.4%. Returns for the S&P 500 Price Return Index are expected to be around 3.4%; here we subtract the average historical dividends of 2%. We also show ranges for U.S. returns. Professor Shiller created a series of value-based indices with Barclays, namely the Shiller Barclays CAPE Family of Indices, which seeks to identify undervalued sectors or stocks using the CAPE Ratio. These indices aim to earn a long-term value premium. While past performance is not guaranteed, if an investor purchased a value-based index and held this for the long term, they may generate higher returns than forecast if the value factor performs well.

UNITED STATES FORECAST RETURNS	EXPECTED ANNUALIZED RETURNS
Expected Nominal Total Returns* (S&P 500 Total Return Index)	5.4%
Upper Range of Expected Nominal Total Returns* (95% Confidence Level)	11.0%
Lower Range of Expected Nominal Total Returns* (95% Confidence Level)	-0.2%
Approximate Expected Nominal Price Returns* (S&P 500 Price Return Index)	3.4%

\*using the CAPE Ratio

#### Historical U.S. CAPE Ratio Over the Last 30 Years



#### Europe - Forecasts Based on the MSCI Europe Index

The CAPE Ratio for Europe is 19.4 and the expected 10-year annualized nominal total return is 7.5% as of the end of this quarter. Price returns for the MSCI Europe Price Return Index are forecast to be around 4.4%, when we subtract the historical dividend yield and assume this holds true for the next 10 years. We also show ranges for European returns.

EUROPE FORECAST RETURNS	EXPECTED ANNUALIZED RETURNS
Expected Nominal Total Returns* (MSCI Europe Total Return Index)	7.5%
Upper Range of Expected Nominal Total Returns* (95% Confidence Level)	20.2%
Lower Range of Expected Nominal Total Returns* (95% Confidence Level)	-5.2%
Approximate Expected Nominal Price Returns (MSCI Europe Price Return Index)	4.4%
*using the CAPE Ratio	

#### **Europe - Historical CAPE Ratio**



# Japan - Forecasts Based on the MSCI Japan Index

The CAPE Ratio for Japan is 20.3, and the expected 10-year annualized nominal total return with the CAPE Ratio is 9.7%. Price returns for the MSCI Japan Price Return Index are forecast to be 7.3%; again, we subtract the historical dividend yield from Bloomberg and assume this holds for the next 10 years. We also show ranges for Japanese returns. Note our forecasts include the bubble period in Japan in the 1980s, and this may overstate some of the numbers.

JAPAN FORECAST RETURNS	EXPECTED ANNUALIZED RETURNS
Expected Nominal Total Returns* (MSCI Japan Total Return Index)	9.7%
Upper Range of Expected Nominal Total Returns* (95% Confidence Level)	23.2%
Lower Range of Expected Nominal Total Returns * (95% Confidence Level)	2.4%
Approximate Expected Nominal Price Returns (MSCI Japan Price Return Index)	7.3%
*using the CAPE Ratio	

### Japan - Historical CAPE Ratio



#### **Approach to Forecasting**

We outline our approach to forecasting in this section. First, we predict the expected real returns based on the CAPE Ratio, as developed by Robert Shiller and John Campbell in their paper "Stock Prices, Earnings and Expected Dividends." To generate the forecast, we regress 10-year real returns on the prevailing CAPE level and a real-long-term interest rate, and then we project returns based on the plane of best fit. These are then converted to nominal returns using average inflation rates from the OECD from 2017 to Q4 2023, which includes historical and forecast inflation rates from the OECD. We also show ranges for each country's forecasted returns to indicate the uncertainty around our forecasts.

In the third edition of Irrational Exuberance, Professor Shiller noted that returns are influenced both by the CAPE and an estimated long-term interest rate. Given that interest rates are unusually low by historical standards, we also produce a third forecast of excess equity returns over bonds where we regress excess equity returns, the CAPE Ratio as well as the prevailing level of interest rates. Some commentary has noted that higher CAPE Ratios may be justified by low rates.

We expect that in years to come the science of narrative economics, with the expansion of our use of digitized text and artificial intelligence to look for specific indicators of public spreading of ideas, will be used to narrow our prediction intervals. They may be able to develop time series of evidence on how the public will be thinking about multiple relevant economic narratives, such as about the intense COVD-19 pandemic narrative with its politicized connection to other narratives, or about the prospects for world war, or about climate change, to improve our forecasts of economic variables. At this juncture, however, we use the CAPE ratio suggesting overpricing or underpricing to help us predict the markets.

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